Part 1 - Amendments to Specification

1. Replace the paragraph on page 1, lines 5-15, with the following paragraph:

This invention is related to other inventions made by at least one of the inventors herein for Individually-Contoured Seat Cushion and Shape Capturing and Fabricating Method for Seat Cushion described in U.S. patent application Serial No. ~~[249.301]~~ 10/628,858, and for Contoured Seat Cushion and Method for Offloading Pressure from Skeletal Bone Prominences and Encouraging Proper Postural Alignment described in U.S. patent application Serial No. ~~[249.303]~~ 10/628,860, and for Apparatus and Method for Evaluating Clearance from a Contoured Seat Cushion described in U.S. patent application Serial No. ~~[249.304]~~ 10/628,890, all of which are filed concurrently herewith and all of which are assigned to the assignee of the present invention. The subject matter of these concurrently-filed applications is incorporated herein by reference.

2. Replace the paragraph on page 3, lines 21-28, with the following paragraph:

Generic seat cushions may not be comfortable or offer the best fit for a particular user. The size, posture and anatomical characteristics of an individual may influence the comfort and fit of the seat cushion. Certain of these anatomical areas have a prominent skeletal bone structure. Excessive pressure in the areas of prominent bone structure increases the risk of pressure ulcers which can have very serious medical consequences. The problems of existing seat cushions are discussed more completely in the concurrently filed U.S. patent application Serial No. ~~[249.303]~~ 10/628,860 referenced above.

3. Replace the paragraph on page 3, line 29 through page 4, line 10, with the following paragraph:

Having a custom wheelchair cushion built to accommodate the anatomy and preferences of a specific individual is an option which overcomes the disadvantages associated with generic wheelchair cushions. There are a number of very sophisticated methods and devices available to create custom wheelchair cushions, but

the ability to capture and use the anatomical shape of the user when creating the cushion is very important, as discussed in U.S. patent application Serial No. ~~[249.301]~~ 10/628,858 referenced above. Furthermore, even if the support contour of the custom cushion is initially satisfactory, that support contour may ultimately prove to be inappropriate or uncomfortable after the cushion has been used for some period of time. Tissue changes influenced by continually sitting on the cushion over some period of time may change the optimal support and comfort characteristics. It is also typical that tissue may atrophy over time, particularly for first-time wheelchair users, further compromising cushion fit.

4. Replace the paragraph on page 12, lines 1-17, with the following paragraph:

Preferably, the shape and proportion of the standard variations in the support contour 32 will be as described in U.S. patent application Serial No. ~~[249.303]~~ 10/628,860, referenced above. The support contour described in this U.S. patent application has considerable advantages and improvements in avoiding pressure ulcers while providing improved postural alignment for the user. Adjusting the size and proportion of this standard support contour 32 accommodates different sizes and shapes of the normal anatomy. For example, one standard variation of the support contour 32 is intended to primarily accommodate the wider spread and shallower slope of the ischial tuberosities of the female skeletal bone structure. Another standard variation of the support contour 32 is intended to accommodate the narrower and steeper slope of the ischial tuberosities of the male skeletal bone structure. Another standard variation of the support contour 32 is not gender-specific, but has a deeper and steeper profile. This deeper and steeper support contour 32 may provide better protection for individuals with soft tissue atrophy. However, regardless of sex or degree of tissue atrophy, any user may prefer any one of these different standard variations of support contours, depending on personal comfort, support and preference.

5. Replace the paragraph on page 12, lines 18-22, with the following paragraph:

In general, a variety of different support contours and theories for supporting wheelchair users are known and available, in addition to the subject matter described in U.S. application Serial No. ~~[249.303]~~ 10/628,860. Any type of support theory can be implemented in the support contour 32 of the human interface portion 26, in accordance with the present invention.

6. Replace the paragraph on page 12, lines 23-31, with the following paragraph:

In those cases where an individualized or custom support contour 32 is desired, that custom support contour 32 must be derived and made from the particular anatomical characteristics of the individual user. A number of known techniques are available to create custom wheelchair cushions, and those known techniques may be applied to create the support contour 32 and the human interface portion 26 in accordance with the invention. One particularly useful type of technique for creating a seat cushion is described in U.S. patent application Serial No. ~~[249.301]~~ 10/628,858, referenced above. That technique is applicable to fabricating both the human interface portion 26 and the base portion 28.

7. Replace the paragraph on page 18, line 18 through page 19, line 2, with the following paragraph:

The human interface portion 26 and the base portion 28 may be formed of flexible support material such as moldable plastic foam. One particularly advantageous type of material from which to make the human interface portion 26 and the base portion 28 is plastic beads, as described more completely in U.S. patent applications Serial Nos. ~~[249.301 and 249.303]~~ 10/628,858 and 10/628,860. The plastic bead material is fused together in such a way that spaces exist between the individual fused beads. The spaces between the individual fused beads make the portions 26 and 28 breathable in the sense that air will move through them, thereby providing ventilation through the cushion to the user. In addition, the base portion 28 may be formed somewhat more rigidly and having less flexibility than the human interface portion 26,

to add structural stability to the cushion 20. The human interface portion 26 may be somewhat more flexible to accommodate interaction with the user's anatomy. The differences in flexibility and rigidity may be accommodated by using different sizes and resiliencies of plastic beads and different degrees of compaction of those plastic beads when fusing them together, as described in U.S. patent applications Serial Nos. ~~[249.301 and 249.303]~~ 10/628,858 and 10/628,860.